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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,436	03/01/2002	Rene P. Helbing	10004262-1	3468

7590 10/27/2003

AGILENT TECHNOLOGIES, INC.
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EXAMINER	
FLORES RUIZ, DELMA R	

ART UNIT	PAPER NUMBER
2828	

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,436	HELBING ET AL.	
	Examiner	Art Unit	
	Delma R. Flores Ruiz	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

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TECHNOLOGY CENTER 2800

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 26 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: Claims 1, 8, 14, 19, and 23 for example presents a mere recitation of a group of elements without disclosing how said elements are interrelated in order to perform as an apparatus capable of carrying through any perceptible actions. There is no structural or means recited in the claim, for performing the apparatus, example a laser, modulator, demultiplexer, etc. One of ordinary skill in the art will not understand the apparatus since the components of the apparatus are not clearly stated at the claim as a complete structure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 4, 6 – 11, 13 and 19 – 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Stinson et al (6,603,781).

Regarding claim 1, Stinson dislcoses a multiple wavelength output light source, comprising: a laser device (see Fig. 1, Character 12 and see Fig. 4, Character 402) having a plurality of output wavelengths (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a plurality of output wavelengths, and therefore said limitations are said to be inherently disclosed in the teachings of Stinson); a demultiplexer (see Fig. 1, Character 14, and see Fig. 4, Character 406) for separating the plurality of output wavelengths; and a plurality of modulators (see Fig. 1, Characters 16_1 and 16_n and see Fig. 4, Characters 404_1 and 404_n) associated with and configured to modulate each

wavelength (Abstract, Column 1, Lines 13 – 16, Column 2, Lines 47 – 67, and Column 3, Lines 1 - 11).

Regarding claim 2, Stinson discloses a the laser device, the plurality of modulators and the demultiplexer are fabricated on one substrate and comprise one module (see Figs. 1, 3 and 4).

Regarding claim 3, Stinson dislcoses a plurality of output wavelengths represents the output spectrum of the laser device (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a plurality of output wavelengths represents the output spectrum of the laser device, and therefore said limitations are said to be inherently disclosed in the teachings of Stinson).

Regarding claim 4, Stinson discloses a optical filter (see Fig. 4, Character 416) configured to receive the plurality of output wavelengths and modify each wavelength to a predetermined profile (Column 6, Lines 24 – 68 and Column 7, Lines 1 – 5).

Regarding claim 6, Stinson discloses a combining device configured to combine each of the plurality of modulated wavelengths onto a single optical fiber (Column 7, Lines 57 – 63, Column 8, Lines 53 – 68, and Column 9, Lines 1 – 13).

Regarding claim 7, Stinson discloses a laser device has a spectral distribution including distinct peaks, each of the output wavelengths corresponding to a different one of the peaks (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a spectral distribution including distinct peaks, each of the output wavelengths corresponding to a different one of the peaks, and therefore said limitations are said to be inherently disclosed in the teachings of Stinson).

Regarding claim 8, Stinson discloses a method for forming a broad spectrum modulated laser output, the method comprising: providing a laser device (see Fig. 1, Character 12 and see Fig. 4, Character 402) having a plurality of output wavelengths(said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a plurality of output wavelengths, and therefore said limitations are said to be inherently disclosed in the teachings of Stinson); separating the plurality of output wavelengths; and modulating (see Fig. 1, Characters 16_1 and 16_n and see Fig. 4, Characters 404_1 and 404_n) each of the plurality of output wavelengths.

Regarding claim 9, Stinson dislcoses a laser device and performing the modulating step and the separating step on a single module (see Figs. 1, 3 and 4).

Regarding claim 10, Stinson discloses a plurality of output wavelengths represents the output spectrum of the laser device (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a plurality of output wavelengths represents the output spectrum of the laser device, and therefore said limitations are said to be inherently disclosed in the teachings of Stinson).

Regarding claim 11, Station discloses a modifying each wavelength to a predetermined profile (see Fig. 4, Column 6, Lines 24 – 68 and Column 7, Lines 1 – 5).

Regarding claim 13, Station discloses a combining each of the plurality of modulated output wavelengths onto a single optical fiber (Column 7, Lines 57 – 63, Column 8, Lines 53 – 68, and Column 9, Lines 1 – 13).

Regarding claim 19, Station discloses a laser (see Fig. 1, Character 12 and see Fig. 4, Character 402) that outputs plural wavelengths (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a plurality of output wavelengths, and therefore said limitations are said to be inherently disclosed in the teachings of Stinson); and modulator (see Fig. 1, Characters 16_1 and 16_n and see Fig. 4, Characters 404_1 and

404_n) means for modulating each of the wavelengths independently (Abstract, Column 1, Lines 13 – 16, Column 2, Lines 47 – 67, and Column 3, Lines 1 - 11).

Regarding claim 20, Station discloses a separator means for spatially separating the plural wavelengths upstream of their modulation (see Fig. 1, Characters 16_1 and 16_n and see Fig. 4, Characters 404_1 and 404_n) by the modulator means (Abstract, Column 1, Lines 13 – 16, Column 2, Lines 47 – 67, and Column 3, Lines 1 - 11).

Regarding claim 21, Station discloses a combiner means for spatially combining the wavelengths as modulated by the modulator (see Fig. 1, Characters 16_1 and 16_n and see Fig. 4, Characters 404_1 and 404_n) means (Abstract, Column 1, Lines 13 – 16, Column 2, Lines 47 – 67, and Column 3, Lines 1 - 11).

Regarding claim 22, Station discloses a laser (see Fig. 1, Character 12 and see Fig. 4, Character 402) has a spectral distribution including distinct peaks, each of the wavelengths corresponding to a different one of the peaks (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a spectral distribution including distinct peaks, each of the output wavelengths corresponding to a different one of the peaks, and therefore

said limitations are said to be inherently disclosed in the teachings of Stinson).

Regarding claim 23, Station discloses a optical method comprising: operating a laser to provide an output characterized by plural wavelengths; and modulating the plural wavelengths independently (See Figs. 1 and 4, Abstract, Column 1, Lines 13 – 16, Column 2, Lines 47 – 67, and Column 3, Lines 1 - 11).

Regarding claim 24, Station discloses a separating the plural wavelengths upstream of the modulating (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a separating the plural wavelengths upstream of the modulating, and therefore said limitations are said to be inherently disclosed in the teachings of Station).

Regarding claim 25, Station discloses a combining the wavelengths downstream of the modulating (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a the wavelengths downstream of the modulating, and therefore said limitations are said to be inherently disclosed in the teachings of Station).

R garding claim 26, Station discloses a the wavelengths correspond to distinct peaks in the spectral distribution of the output of the laser, (said limitation only recites

facts and features that are well known and expected, the same features that essentially result from the use or application of a wavelengths correspond to distinct peaks in the spectral distribution of the output of the laser,, and therefore said limitations are said to be inherently disclosed in the teachings of Station).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 12, 15 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Station (6, 603,781) in view of Murakami et al (6,570,703).

Regarding claim 5, 12, 14, 15, Station discloses the claimed invention except for a Fabry Perot laser. It would have been obvious at the time of applicant's invention, to combine Murakami of teaching a Fabry Perot laser with multiple-wavelength output light source, and board spectrum modulated laser output because the Fabry Perot laser user to emitting radiation and a distributed feedback laser.

Regarding claim 16, Station discloses a plurality of output wavelengths represents the output spectrum of the laser device (said limitation only recites facts and features that are well known and expected, the same features that essentially result from the use or application of a plurality of output wavelengths represents the output spectrum of the laser device, and therefore said limitations are said to be inherently disclosed in the teachings of Stinson).

Regarding claim 17, Station dislcoses a modifying each wavelength to a predetermined profile (see Fig. 4, Column 6, Lines 24 – 68 and Column 7, Lines 1 – 5).

Regarding claim 18, Station discloses a combining each of the plurality of modulated outputs onto a single optical fiber (Column 7, Lines 57 – 63, Column 8, Lines 53 – 68, and Column 9, Lines 1 – 13).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (703) 308-6238. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

Delma R. Flores Ruiz
Examiner
Art Unit 2828

Paul Ip
Supervisor Patent Examiner
Art Unit 2828

DRFR/PI
October 16, 2003